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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,745	03/14/2005	Rosemary Gouaisbault	26656U	9172

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THE NATH LAW GROUP
112 South West Street
Alexandria, VA 22314

EXAMINER	
HELM, CARALYNNE E	
ART UNIT	**PAPER NUMBER**
1615	

MAIL DATE	DELIVERY MODE
10/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,745	GOUAISBAULT ET AL.	
	Examiner	Art Unit	
	CARALYNNE HELM	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24,26-35,37-46,48-56 and 58-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24, 26-35, 37-46, 48-56, and 58-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/14/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24, 26-35, 37-46, 48-56, and 58-65 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicant has exemplified a formulation of the instant invention with the dimethiconol SGM-36 from Dow Corning. Applicant teaches that this particular preferred polymer has a viscosity of 6,400 Pa·s at 25ºC and based upon the data shown, this is a dynamic viscosity. Weijermars also teaches SGM-36 from Dow Corning whose Newtonian (dynamic) viscosity at 25ºC is nearly 50,000 Pa·s (see figure 2 - Weijermars Naturwissenschaften 1986 73:33-34). This constitutes a nearly ten fold difference in viscosity for the same polymer measured at the same temperature.

The Weijermars reference presents viscosity data for SGM-36 that was accepted as standard and cited both before and after the time of the invention (see Arbaret et al. Journal of Structural Geology 2001 23:113-125 and Marques et al. Tectonophysics

2006 415:65-80). So this reference is not a lone representation or beyond the realm of knowledge in the scientific community concerned with such polymers.

In response to a request for information under rule 37 CFR 1.105, applicant was required to provide a listing of polymers that had the claimed viscoelastic properties along with specification data for the SGM-36 used in the invention's specification. Applicant stated that this information was not known or not available and only provided the molecular weight of the "SGM-36" polymer used. This suggests that applicant themselves are not wholly aware of the nature of the material used in their invention, since a molecular formula was not even able to be provided. Therefore applicant has not described the invention in such a manner that it is clear they possessed anything more than the embodiment where the 500,000 molecular weight dimethiconol they called "SGM-36" is combined with an envisioned volatile solvent (e.g. linear dimethicones having 2 to 9 silicon atoms or cyclomethicones having 3 to 8 silicon atoms), optionally a mixture of cyclomethicone D5 and a dimethicone polymer cross-linked in vinyldimethicone, and optionally an envisioned non-viscosity modifying additive (e.g. colouring agent, perfuming agent, anti-oxidising agent or UV-filter) (see specification pages 6-7, 9, and 11).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24, 26-35, 37-46, 48-56, and 58-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 24, 35,46, and 56 recite the broad recitation “a dynamic viscosity of between 4,000 and 10,000 Pa·s at 25ºC”, and the claims also recite “a viscosity of around 6,400 Pa·s at 25ºC” which is the narrower statement of the range/limitation. Claims 26-34, 37-45, 48-55, and 58-65 depend from these claims and therefore are also indefinite for the same reason.

Claims 30, 41, 52, and 62 recite that the composition contains a product “intended to reduce the sticky character of the drops”. This is an intended function that

the applicants envision which has little bearing on the actual identity of this additional component. There is insufficient guidance provided to allow one of ordinary skill in the art to ascertain what collection of compounds is encompassed by this recitation.

Claims 55 and 65 recite that the linear dimethiconol in the composition has 'a viscosity of around 6,400 Pa·s at 25ºC in solution in a volatile solvent comprising hexamethyldisilcone". It is unclear whether a blend of polymer and solvent are being claimed to have this property and to both be a part of the composition or if just the polymer itself is being claimed to have this property and be present with the solvent in the composition. For the sake of application of prior art, the latter interpretation will be used for examination, where a negligible amount of solvent is present.

Claims 24, 35, 46, 55-56, and 65 recite that the dimethiconol has "a viscosity around 6,400 Pa·s at 25ºC". This recitation does not state what type of viscosity is being claimed. Since there are a number of possible types of viscosities, this recitation is indefinite.

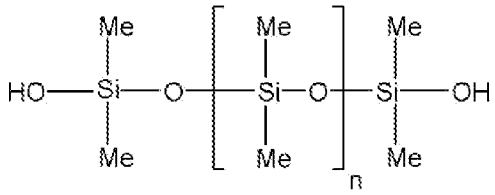
Claim 42 recites the limitation "said product" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 31, 53, and 63 recite the same product however, claim 31 indicates the product is a visocelasticity modifying agent that cannot be present in the composition.

Claims 53 and 63 teach that this same product is present, which contradicts their parent claims. For the sake of application of prior art the contradictory nature of these recitations are not considered, thus the product recited is presumed absent from the composition of claim 31 and present in the compositions of claims 53 and 63.

Claim Interpretation

For the sake of application of prior art, the polymer called dimethiconol in the claims is interpreted to be hydroxyl-terminated polydimethylsiloxane (pictured below).



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The four factual inquiries of Graham v. John Deere Co. have been fully considered and analyzed in the rejections that follow.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 24, 26-29, 31, 33-35, 37-40, 44-46, 48-51, 54-56, 58-61, and 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maksimoski et al. (4,983,383).

Maksimoski et al. teach a cosmetic formulation that comprises a silicone gum, inert particulates (non-viscoelasticity modifying additive), and a volatile solvent (see claims 1-9; instant claims 24, 34-35, 45-46, 54, 56, and 64). The product recited in instant claim 31 is not taught to be present in the composition. The silicone gum is envisioned as a polydimethylsiloxane, where hydroxyl end-capped polymers (dimethiconol) are particularly envisioned (see claim 6 and column 3 lines 6-8; instant claims 24, 35, 46, and 56). Silicone gum (dimethiconol) is taught present at 0.05-10%

(see claim 1; instant claims 24, 28, 35, 39, 46, 50, 56, and 60). Optimization of the proportion of silicone gum (dimethiconol) that would occur as a matter or routine experimentation would be obvious to one of ordinary skill in the art at the time of the invention (see instant claims 29, 40, 51, and 61). In addition, the silicone gum is also contemplated to be a 500,000 molecular weight polymer (see column 3 lines 17-19). Based upon these teachings it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a 500,000 molecular weight hydroxyl-terminated polydimethylsiloxane (dimethiconol) as the silicone gum. Applicant has indicated on the record that the dimethiconol polymer exemplified in its example has a molecular weight of 500,000. Thus since Maksimoski et al. make obvious a 500,000 molecular weight dimethiconol polymer, it would necessarily have the same viscoelastic properties as that of the applicant (e.g. viscosity around 6400 Pa·s at 25ºC, G' < G" for 0.3 Hz < ω and G' > G" for $\omega < 3$ Hz and G' = G" for some ω when 3 Hz < ω < 3 Hz). The volatile solvent is taught to be a cyclic or linear polydimethylsiloxane with about 3 to about 9 silicone atoms (see column 4 line 51-column 5 line 11; instant claims 26, 37, 48, and 58). This recitation is interpreted to include the compound with two silicone atoms, hexamethyldisiloxane (see instant claims 27, 38, 49, and 59). Maksimoski et al. also teach the method of applying their compositions to keratin fibers, specifically hair (see column 17 lines 40-41; instant claims 24, 33, 35, and 44). It therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to apply to hair cosmetic composition with dimethiconol (with the claimed viscoelastic properties)

as the silicone gum, inert particulates (non-viscoelasticity modifying additive), and hexamethyldisiloxane as the volatile solvent.

The instant claims recite the intended use of "intended to form drops" and "intended notably for the make-up of keratin fibres, in forming drops at their tips upon application". A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (see MPEP 2111.02 (II)). Here the composition of Maksimoski et al. made obvious by would be capable of performing these functions. Therefore claims 24, 26-29, 31, 33-35, 37-40, 44-46, 48-51, 54-56, 58-61, and 64-65 are obvious over Maksimoski et al.

Claims 24, 27, 30-32, 35, 38, 41, 43, 46, 49, 52-53, 56, 59, and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krzysik (US Patent No. 5,399,3342) in view of Sandewicz et al. (US Patent No. 6,451,329).

Krzysik teaches a mascara composition that includes a dimethiconol at 10% as well as a volatile solvent, where hexamethyldisiloxane is envisioned (see table I and column 5 lines 31-32 and 43-44; instant claims 24, 27, 35, 38, 46, 49, 56, and 59). The exemplified dimethiconol is taught to have ten thousand repeat units (see column 4 lines 64-66). It is known that the viscosity of silicone polymers is modified by changes in the number of repeat units. It is the examiner's position that since the molecular weight of the taught dimethiconol is slightly greater than that of the dimethiconol exemplified by

applicant, the dynamic viscosity of the taught polymer would be near the upper end of the claimed range. Through routine experimentation one of ordinary skill at the time of the invention would have found it obvious to optimize the viscosity, and associated viscoelastic properties, thereby resulting in a dimethiconol with the claimed properties. The application of the mascara compositions (to eyelashes) is taught by Krzysik (see column 4 lines 39-47; instant claims 24 and 35). Although additional components known for utility in cosmetic compositions are envisioned, Krzysik do not teach the presence of a mixture of cyclomethicone D5 and a dimethicone polymer crosslinked by vinyldimethicone.

Sandewciz et al. teach cosmetic compositions that include a variety of known cosmetic components including dimethiconols (see column 7 lines 1-3 and abstract). In particular, Sandewicz et al. teach that dimethicone/vinyl dimethicone crosspolymer (a mixture of cyclomethicone D5 and a dimethicone polymer crosslinked by vinyldimethicone) is known for inclusion in such composition to enhance the finish of the composition in use (see column 11 lines 17-24; instant claims 30-32, 41, 52-53, and 62-63). Since the final finish of a composition used to enhance the appearance of eyelashes is important, one of ordinary skill in the art would have found it obvious at the time of the invention to include this particular enhancer in the composition of Krzysik. Therefore claims 24, 27, 30-32, 35, 38, 41, 43, 46, 49, 52-53, 56, 59, and 62-63 are obvious over Krzysik in view of Sandewicz et al.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Thursday 8-5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caralynne Helm/
Examiner, Art Unit 1615

/MP WOODWARD/
Supervisory Patent Examiner, Art Unit 1615